Serial No.: 10/830,023

Docket No.: 025720-00033

## **AMENDMENTS TO THE CLAIMS**

## Listing of the claims:

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

1. (Currently Amended) A duplexer comprising

a ladder filter and a multimode filter that are formed on an identical surface of a

predetermined substrate,

a first comb-like electrode of the ladder filter and a second comb-like electrode of the

multimode filter having an identical layer structure with an equal film thickness,

the first comb-like electrode and the second comb-like electrode being formed with single-

layer films mainly containing aluminum,

the relationship among the film thickness h, in meters, of the first comb-like electrode and

the second comb-like electrode, the center frequency f<sub>1</sub>, in Hertz, of the frequency band of

the ladder filter, and the center frequency f2, in Hertz, of the frequency band of the

multimode filter, being expressed as:

$$300 \le h \times f_1 \le 480$$

$$300 \le h \times f_2 \le 430$$
.

2. (Original) The duplexer as claimed in claim 1, wherein the relationship among the film thickness h, the center frequency  $f_1$ , and the center frequency  $f_2$ , is expressed as:

$$300 \le h \times f_1 \le 420$$

$$350 \le h \times f_2 \le 410$$
.

3. (Currently Amended) A duplexer comprising

a ladder filter and a multimode filter that are formed on an identical surface of a

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piezoelectric substrate,

a first comb-like electrode of the ladder filter and a second comb-like electrode of the multimode filter having an identical layer structure with an equal film thickness,

the first comb-like electrode and the second comb-like electrode being formed with single-layer films mainly containing aluminum, or single- or multi-layer films including n layers (n being an integer of 1 or greater), the n layers including a layer mainly containing a metal other than aluminum,

the relationship among the film thickness  $h_k$ , in meters, of the kth layer (k being an integer of 1 or greater) of the first comb-like electrode and the second comb-like electrode, the specific gravity  $a_k$  of the metal of the kth layer with respect to aluminum, the center frequency  $f_1$ , in Hertz, of the frequency band of the ladder filter, and the center frequency  $f_2$ , in Hertz, of the frequency band of the multimode filter, being expressed as:

$$300 \le f_1 \times \sum_{k=1}^{n} (a_k \times h_k) \le 480$$

$$300 \le f_2 \times \sum_{k=1}^{n} (a_k \times h_k) \le 430$$

4. (Previously Presented) The duplexer as claimed in claim 3, wherein the relationship among the film thickness  $h_k$ , the specific gravity  $a_k$ , the center frequency  $f_1$ , and the center frequency  $f_2$ , is expressed as:

$$300 \le f_1 \times \sum_{k=1}^{n} (a_k \times h_k) \le 420$$

$$350 \le f_2 \times \sum_{k=1}^{n} (a_k \times h_k) \le 410$$

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5. (Original) The duplexer as claimed in claim 1, wherein the predetermined substrate is a rotated Y-cut X-propagation lithium tantalate substrate on which surface acoustic wave propagates in the X direction.

6. (Original) The duplexer as claimed in claim 1, comprising a plurality of multimode filters.